ABSTRACT OF THE DISCLOSURE

A CDMA communication system comprises a base station and a mobile station. In the mobile station, a pilot demodulator demodulates first and second pilot signals by reception path using antenna pilot demodulators. An antenna phase difference calculator determines phase difference Angle(n) for the first and second pilot signals on each reception path. By vector-adding phase difference Angle(1), Angle(2), ... , Angle(n), average Angle_a is determined as the average phase difference Angle(1), Angle(2), ... , Angle(n). This average Angle_a is used as the phase difference data for a feedback control in the base station.

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